



U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

# Advisory Circular

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**Subject: OCEANIC OPERATIONS**

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**Initiated by: AFS-550**

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**1. PURPOSE.** This advisory circular (AC) contains information and guidance to be used by operators and pilots planning oceanic flights.

**2. RELATED READING MATERIAL.** Order 8400.10, "Air Transportation Operations Inspector's Handbook," Order 8700.1, "General Aviation Operations Inspector's Handbook," and documents listed in Appendix 3, Bibliography section, of this AC. The orders may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

**3. BACKGROUND.** Presently there are several issues that are significant to the United States and civil aviation authorities of other countries relative to oceanic flight operations. The majority of these issues involve the large amount of air traffic over the North Atlantic (NAT) between Europe and the United States. Most air carriers plan eastbound flight departures in the evenings so that morning arrival in Europe will permit a full day's business or touring. Air carriers plan westbound flight departures for just the reverse reason, leaving in the morning so passengers arrive in the United States at a convenient local time. The westbound flights do not create a problem in air traffic congestion due to the breadth of the eastern coast of the United States. However, eastbound flights arriving in Europe from North America converge on the relatively small geographic area of the United Kingdom and have to be filtered onto extremely crowded European routes (ER). Because of this situation, traffic control across the NAT is strictly regulated by International Civil Aviation Organization (ICAO) rules adopted following agreement between member states. Flights in the airspace designated as **Minimum Navigation Performance Specifications (MNPS)** airspace and/or (future) **Reduced Vertical Separation Minimum (RVSM)** airspace require aircraft to obtain a Letter of Authorization (LOA) to fly in this airspace. In the past, these letters were issued by FAA Flight Standards District Offices (FSDO) in a manner and form determined by each office. There was no suspense date or numbering system required on the letters. This situation caused a great deal of international concern because letters stayed with aircraft for an indefinite period of time and were impossible to track. Pressure by ICAO member states has caused the FAA to reevaluate the process of issuing these letters, and to standardize the format and procedures for issuance.

Another area of concern in the NAT, as well as other areas, is that of general aviation oceanic navigation performance experienced by nonturbine light aircraft. Search and rescue missions conducted by ICAO member states for U.S.-registered aircraft that have strayed off course have imposed a severe strain on those states. This situation has demanded action on the part of the U.S. Government. This situation had also had a negative impact on international relations between the United States and other ICAO member states. U.S.-registered aircraft making oceanic flights and departing from the United States are not required to have an LOA and/or an inspection unless they are to penetrate MNPS airspace. These aircraft are required, however, to submit to an inspection of both the aircraft and the flightcrew if departing from or overflying Canada.

Flights in the Northern Pacific (NOPAC) en route to Asia do not have to contend with the same traffic density as NAT operations. Although navigation in the NOPAC once involved serious political implications

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if a navigation error occurred, this is no longer the case. However, the length of the overwater routes makes it imperative that aircraft flying in the Pacific have well-trained flightcrews, high quality communication equipment, high quality long-range navigation equipment, and more than adequate fuel supplies on board. The same requirements apply to U.S. west coast - Hawaii routes and Hawaii - Tokyo routes.

Flights in the Caribbean and the Gulf of Mexico do not involve long distances over water, but they often encounter severe tropical weather, exceed the service volume of navigation facilities, and encounter the sensitivity of national defense agencies to the southern borders of the United States.

**4. DISCUSSION.** In response to the concerns discussed above, the FAA has done the following:

- Published this AC as a single source document for flightcrews planning oceanic flight.
- Standardized LOA's for flights into MNPS airspace.
- Established a tracking system and statistical database of overseas navigation error reports (ONER), oceanic altitude deviation reports (OADR), reports of erosion of longitudinal separation, and LOA verification requests.
- Standardized the LOA format and issuance procedures for FAA inspectors through guidance in the FAA's inspector handbooks.

This document is designed to be comprehensive; however, not all chapters are applicable to all operations. The publications cycle of this AC is such that it is impossible for up-to-the-minute details of all political, geographic, navigational, and communications information to be included. It is therefore recommended that operators use this document only for general guidance and to verify specifics by consulting the most recent Aeronautical Information Publication (AIP), international Notice to Airmen (NOTAM), and information from the U.S. Department of State.

**5. OVERVIEW.** To facilitate the use of this AC, without requiring the reading of unnecessary chapters, the following summaries are presented:

- Chapter 1 should be read by those interested in the legal foundations for oceanic regulatory control.
- Chapter 2 should be read by all operators with emphasis on those sections pertinent to their operations, as this is an overview of all oceanic operations.
- Chapter 3 should be read by all operators planning NAT flights, regardless of the nature of the operation. It is imperative that anyone flying in the NAT have a detailed knowledge of the special airspace in this oceanic area.
- Chapter 4 should be read by all operators planning NOPAC flights.
- Chapter 5 should be read by all operators planning flights in the Pacific outside the NOPAC area.
- Chapters 6 and 7 contain details on Caribbean and Gulf of Mexico operations.
- Chapter 8 provides detailed navigation information. Not all sections will pertain to all operators. It is recommended that this chapter be scanned by all operators, and that the information pertinent to their operations be read in detail.
- Chapter 9 discusses helicopter oceanic operations.
- Chapter 10 is important to all oceanic operations. ICAO requirements for flightcrew training and foreign nation's individual requirements (Canada, for example) demand varying degrees of training for flightcrews. It is recommended that all flightcrews receive the level of training required for their operation.
- Chapter 11 includes specific guidance for Federal Aviation Regulations (FAR) Part 91 operations.

- Chapter 12 describes the polar track system and includes some food for thought from Admiral Byrd.
- Chapter 13 - Caution should be exercised when planning flights to the former Soviet Union. The ever-changing political situation of the destination countries necessitates close scrutiny of AIP's, international NOTAM's, and contact with the Department of State prior to planning operations in those areas.
- The four appendixes are included to provide operators with copies of necessary documents, charts, references, and definitions that may be difficult to obtain from other sources.

The FAA's efforts will be meaningless without the cooperation of flightcrews and operators involved with oceanic operations. Therefore, individuals planning this type of operation should avail themselves of the contents of this AC and of the resource materials listed in the appendixes. It is only through the cooperative efforts of flightcrews, operators, industry groups, and the FAA that safe operations can be conducted in oceanic airspace.

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David R. Harrington  
Acting Director, Flight Standards Service